4. Notes on the Habits of Menura alberti. By A. A. Leycester, Esq. (In a Letter addressed to John Gould, Esq., F.R.S., &c.)

The habits of this bird are very similar to those of the Menura superba, as described by Mr. Gould, but, as that gentleman has begged for a full description of them, I send all the particulars I

have been able to collect.

The Menura alberti is famous for its most extraordinary mocking capabilities. It is found only on the Brisbane and Tweed rivers and in the neighbourhood of their waters. It inhabits the rushes, and generally chooses a sandy soil for its locality. I never saw more than a pair together, male and female. Each male bird has his walk or boundary, and gives battle if another male encroaches on it. He commences singing some time before the dawn of day, being the earliest of the forest-birds in this respect. His song is much varied, as besides his own peculiar note he imitates the cries of all the birds in the bush, such as the Laughing Jackass (Dacelo gigas), and even the mournful howl of the Owl and the thrilling scream of the Curlew. When singing and playing about he spreads his tail over his back like a peacock. He scratches and picks at the earth while singing, which he generally does until about an hour after sunrise. He then becomes silent, and remains so until about an hour before sunset, when he again commences, and continues singing and playing about until it is quite dark. This Menura feeds entirely upon insects, mostly small beetles, mingled with a goodly proportion of sand. It has no crop or upper stomach. The male bird is about four years old before he gets his full tail, as I have proved by shooting examples in full feather with the tail in four different stages of development; the two centre curved feathers are the last to make their appearance. It breeds in winter, commencing its nest in May, laying in June, and hatching its young in July. It generally builds on some bare rock where there is a sufficient shelter for a lodgment, so that no animals or vermin can approach. The nest is constructed of small sticks interwoven with long dry roots and moss, the inside being composed of the skeleton leaf of the parasitical tree-fern, which makes an inside lining, and is very similar to horse-hair. It is completely rain-proof, and has an entrance at the side. The hen lays only one egg of a very dull colour, looking as if it had been blotched over with ink. The young bird when first hatched is covered with a white down, and remains in the nest about six weeks before it takes its departure. The flesh is not good for food, being of a dark colour, tough and dry. The aboriginal name is Colwin.

5. On the Reptiles of Siam. By Dr. Albert Günther. (Reptilia, Pl. XXIII.)

There is no part of Tropical Asia of which the Amphibio-fauna is so little known as that of Siam. The only information on the No. 424.—PROCEEDINGS OF THE ZOOLOGICAL SOCIETY.

subject must be gathered from some old works, and this is scanty enough, as we shall see hereafter. And yet, what has been considered down to the present day the scarcest and most remarkable species of Snake—Herpeton tentaculatum—proves now to be an inhabitant of this very country. A collection of reptiles, transmitted last year by M. Mouhot to the British Museum, contains two specimens of this Reptile, beautifully preserved in every respect, and also twenty-two other species. We thus gain a first step to a fuller knowledge of Siamese Herpetology. I proceed to give an account of this collection.

- 1. Emys Siamensis, Grav.
- 2. CALOTES VERSICOLOR, Daud.
- 3. GECKO VERUS, Merr.
- 4. TILIQUA RUFESCENS, Shaw.

This species varies very much: the posterior frontals form a more or less broad suture together in some of the specimens, whilst in others they are entirely separated from each other by the intervening medial shield. The black lateral streak is most conspicuous in individuals of middle age, and is gradually lost in older ones; it disappears entirely if the epidermis is stripped off. Young individuals are uniform blackish-ash, minutely speckled with whitish.

- 5. XENOPELTIS UNICOLOR, Reinw.
- 6. Typhlops diardii.
- 7. CALAMARIA QUADRIMACULATA, Dum. et Bibr.
- 8. Simotes trinotatus, Dum. et Bibr., var.

Duméril states correctly the number of longitudinal series of scales, which is twenty-one. The Siamese specimen, however, differs in the coloration, having the belly pure white, the back reddish-olive, some scales being blackish, and forming transverse streaks in regular interspaces, but not three distinct series of spots.

- 9. TROPIDONOTUS QUINCUNCIATUS, Schleg. var. F., Gthr.
- 10. HYPSIRHINA AER, Wagl. Variety without series of spots on the belly or tail.
 - 11. HERPETON TENTACULATUM, Lacép. (Pl. XXIII.)

This Snake is hitherto known from a single discoloured specimen only, which has served for all the descriptions published. After the account and the figure given by Schlegel, it does not appear necessary to repeat a description of the form, or of the shields and scales, in which our specimens do not show any difference. The larger of the specimens is an adult male, 25 inches long, the smaller half-grown, 13 inches long. The coloration and the dentition are as follows:—

The ground-colour of the broad back is brown or olive-brown, bordered on each side by a black line, which becomes indistinct posteriorly, and is more conspicuous in the young specimen; those black lines are separated from each other by five or six series of scales, and show button-like swellings in regular interspaces; black transverse lines run obliquely from one line to the other, most conspicuous on the anterior part of the trunk, whilst they appear in the form of specks towards the middle of the length, entirely disappearing posteriorly. A blackish-brown band proceeds from the tentacle through the upper half of the eye along the side of the body to the end of the tail; it occupies two to three series of scales, and is separated from another similar band, running along the lower part of the side, by a brownish-yellow band-like interspace. The lower of the blackish bands is confluent with the upper on the side of the The lower parts are brownish-yellow, with a pair of darker longitudinal streaks, flanking the abdominal shields. There is a series of white or faint rose-coloured, posteriorly black-edged, spots on each side between the ventral and the lower lateral band; they form very distinct and elegant markings in the younger specimen, where they are continued to the vent, forming altogether twenty-four pairs; some of them are opposite to those of the other side, others alternate with them. These spots are less bright in the old specimen, and distinct only on the anterior part of the belly. The lower lip has a vellowish margin, and there are two wavy yellow lines along the throat.

Duméril made a mistake in suggesting that Herpeton has a long and grooved posterior maxillary tooth, like the snakes of his family of "Platyrhiniens." All the teeth are of equal length, and not one is grooved. They are of moderate strength and somewhat closely set, and there are ten in the upper, and as many in the lower jaw. The series of the palatine and pterygoid bones is formed of fifteen or sixteen. Another very remarkable peculiarity is found in the structure of the intestines, which in the posterior third of the length of the trunk form a big mass of twelve or thirteen convolutions. Having found the same in Acrochordus javanicus, I do not hesitate to remove Herpeton from Homalopsis and the genera allied to it (which have the usual simple intestinal tractus), and to place it beside Acrochordus. Hornstedt has found undigested fruits in the stomach of the latter.

- 12. SPILOTES RADIATUS, Reinw.
- 13. CORYPHODON BLUMENBACHII, Merr. The keels of the scales are not distinct in very young individuals.
 - 14. Coryphodon korros, Reinw.
 - 15. Chrysopelea ornata, Shaw, var. β , Gthr.
 - 16. TRIMESURUS ALBOLABRIS, Gray.

- 17. Oxyglossus Lima, Tschudi.
- 18. RANA VITTIGERA, Wiegm.
- 19. Bufo melanostictus, Schneid.
- 20. Polypedates maculatus, Gray.
- 21. HYLARANA ERYTHRÆA, Schleg.
- 22. KALOULA PULCHRA, Gray.
- 23. PLETHODON PERSIMILIS, Gray.

The earliest notice of Siamese Reptiles is found in *Tavernier* ('Collection of Travels through Turkey into Persia and the East Indies,' Lond. 1684, fol.). In Part 2, book iii. chap. xviii., speaking of the kingdom of Siam, he says, p. 189, "There are some serpents, two foot long, with two heads; but one of them has no motion. There is also another creature, like our Salamander, with a forked tail, and very venomous."

We learn more from the Jesuit Tachard, who published a 'Voyage de Siam des pères Jésuites,' Amsterd. 1689, 8vo. He mentions, p. 155, Gecko verus with the name of Toquet, and describes the species as "Lézards fort vénimeux, trouvés dans les maisons de la ville de Siam" (Juthia). In his other work, 'Second voyage du père Tachard et des Jésuites envoyés par le roy au royaume de Siam,' Paris, 1689, 4to, he gives a figure of the same species, and describes

its anatomy, p. 276.

P. Goüye ('Observatious physiques et mathématiques, envoyées de Siam à l'Académie royale par les pères Jésuites,' etc., Paris, 1688, 8vo.) knows two Siamese reptiles: the one (p. 47, pl. 3) is again Gecko verus: "Le toc-kaie est deux fois plus gros que les lézards verts qu'on voit en France," etc. "En criant il articule très distinctement les deux syllabes toc-kaie." The other is a Crocodile (p. 2, pl. 1, 2) "trouvée dans la fleuve Menam, qui baigne le pied des remparts de Louvo; nom. Ta-kaie." Cuvier (Ann. Mus. x. p. 51. pl. 1, f. 9) has established Crocodilus galeatus, from Goüye's account, and a skull sent by the Jesuits to Paris. Nothing else is known of this species.

Kämpfer, who had visited Siam in 1690, mentions in his 'Geschichte und Beschreibung von Japan,' Lemgo, 1777, 4to. p. 24, venomous water-snakes in the river of Juthia, making their appearance every seventh or tenth year, at the end of the month of May. Several people, bitten by the snakes, died, and every body was prohibited, by a royal order, to bathe or to wash in the river. The snakes are said to be not longer than a finger, and not bigger than a leech, brown- or blue-coloured. This story of small venomous freshwater-snakes is not less doubtful than that of the big Sea-

serpent.

Crawford ('Journal of an Embassy to the Courts of Siam and

Cochinchina,' Lond. 1828, 4to.) observes, pp. 434, 435, that Tortoises and Crocodiles are not so frequent in the Menam as in the Ganges, that Lizards and Snakes are very numerous: "some were obtained even in the court-yard of our dwelling; among those we found no poisonous ones. The Hooded-snake, Coluber naja, is known

to exist; also a Python 12-13 feet long."

From notices made by Sir J. Bowring in 'The Kingdom and People of Siam,' Lond. 1857, 8vo., vol. i., it is evident that there is yet a wide field for the Herpetologist in Siam. P. 228, "The reptiles of Siam are multitudinous; Crocodiles live in the rivers from their mouths to their shallows." P. 230, "There are many species of lizards; the largest is the Tackuet, the tongue of which is divided in two; the noisy Tookay, destroying vermin; Chanaeleons, Flying-lizards; Serpents from the most gigantic to the smallest species." P. 231, "a snake called 'Sun-beam' from its very brilliant colours, inert, the bite of which is said to be mortal; an immense frog sings, especially during rain."

We see from the notes quoted that we can add to the above list some other reptiles: those specifically determined are *Naja tripudians* and *Crocodilus galeatus*, those generically, *Chamæleo* and *Draco*, the Tortoises being mentioned in too general terms to admit of any

further suggestion.

- Description of new species of the genera Dosinia and Cyclina from the collection of H. Cuming, Esq. By Dr. E. Römer of Cassel.
 - 1. Dosinia erythraea, Römer. D. testa subquadrato-orbiculari solidiuscula, medio tumidiuscula, postice compressa et peculiariter inflexa, inæquilaterali; liris crassiusculis, elevatis, sub-irregularibus, sæpe furcatis, postice confluentibus et valde sursum flexis, his scabris sensim extenuatis circumcincta; albida, vel sordide alba, maculis sanguineis lividisve, præcipue ad umbones, infecta, interdum radiis pallide rubris in extremitate postica ornata; umbonibus vix prominentibus, valde incurvatis, paulo retroversis, tenuissime striatis, ferrugineis, in \(\frac{1}{2}\) longitudinis positis; margine ventrali medio dependente, antice exacte curvato, postice subito oblique adscendente; margine dorsali antico brevi, concavo, postice subdeclivi et longe curvato, vix in alæ formam surrecto; lunula profundissima, cordata, linea argutissime circumscripta, longitudinaliter sublamellosa, fusco maculata; area anguste lanceolata, labiis valde elevatis, hiantibus; ligamento profunde immerso; intus flavescente; sinu palliari magno, triangulari, ab initio modice lato, superne multo deminuto, in apice angustissimo, rotundato; lamina cardinali latissima, dentibus cardinalibus crassis, ultimo in valva sinistra pertenui, dente lunulari valido, papilliformi.

Long. 51, alt. 50, crass. 26 mill.

Hab. Mare Rubrum (Hemprich et Ehrenberg), Aden (Cuming).